UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6 1445 ROSS AVENUE DALLAS, TEXAS 75202-2733

SUBJECT: Plug and Abandonment Procedure for Moko Well #3 (API:35-081-02645-00)

EPA file # OK0137, Sac and Fox Nation

Location: NW/4 NE/4 NW/4 Section 22-T17N-R6E, Lincoln County, OK

Following is the plugging procedure for the subject well:

Capacities: 4.5" O.D. 9.5#/ft casing, .0912 ft³/ft, .0162 bbls/ft

7 7/8" hole, .3382 ft³/ft, .0602 bbls/ft 9 5/8" 29 #/ft casing, .4479 ft³/ft, .0792 bbls/ft

Region 6 Environmental Protection Agency Staff will a conduct site visit to the abandoned well on Friday, May 24, 2002, at 10:00. Mr. Kent Sandborn of the Region 6 Staff will meet all contractors interested in viewing the site at the Sac and Fox Tribal Complex at the aforementioned time and date. Mr. Sandborn will address questions concerning the work to be done only during the site visit. Any questions or concerns prior to or after the visit should be addressed to Mr. Tyrone Hoskins. He can be reached at (214) 665-7375.

- 1. At least five working days prior to the plugging operation, notify Mr. Kent Sandborn at EPA's Pawhuska field office (918-557-1615) and notify Mr. Sanford Wells of the BLM (918-621-4141), so that a representative may be present to witness the plug and abandonment. The EPA or BLM witness may be required to modify the details of the plugging procedure based on the well bore conditions encountered during the plugging operation. This procedure is based on the condition of the well bore depicted by records on file. Cement should be Class "A" or Class "H" and have a yield of 1.18 ft³ per sack.
- 2. Displace the casing string with 9 #/gallon mud to stabilize the hole.
- 3. A cement plug is required to be set from 2600' to 2733'. Wait on cement and tag top of cement plug. The cement plug can be tagged using tubing or wire-line.
- 4. Measure the free point of the $4\frac{1}{2}$ ". The $4\frac{1}{2}$ " casing is to be shot off approximately 100' above the measured free point and the casing pulled.
- 5. Run tubing to the cut-off point of the 4 ½" casing and place a 100' cement plug. Wait on cement and then tag top of cement.
- 6. Pull tubing to 800', pump 9 ppg mud down tubing and establish circulation. Pump sufficient cement volume to circulate cement to within 3 feet of surface.

7. The 9 5/8" casing is to be cut 3 feet below ground level and the well bore capped with a 1/4" thick metal plate. The plate shall contain the following inscription information: legal description, well number, lease number, API number, and date. The plate shall be welded in place.

Plate inscription:

NW/4 NE/4 NW/4 Section 22-T17N-R6E Well No. 3 Lease Number: 14-20-206-609 (MOKO) API No. 35-081-02645-00

Date Well Plugged:

Note: The date inscribed on plate shall be the date the well was plugged and abandoned and shall be reported on BLM Sundry Form 3160-5.

- 8. Working pit: If a working pit is required, a steel tank shall be used. This tank will be used as a working pit to catch any fluids circulated to the surface. The plugger is responsible for maintaining fluid level in the tank such that overflow does not occur. The tank is required to be emptied and the waste disposed of into an authorized facility.
- 9. Surface restoration: The surface of the lands disturbed in connection with the conduct of operations shall be restored. Soils removed in order to cut the surface casing 3 feet below ground level will be replaced and compacted. The well location is extremely clean and has a good stand of grass. Recontouring a small area around the well bore may be necessary after the well is plugged.
- 10. The Contractor is responsible for the disposal of any casing and any other equipment salvaged in the plugging of this well. This material is to be removed from the site and/or lease prior to payment of the contract.
- 11. Within 30 days of completion of operations the contractor shall complete and submit an original and 4 copies of the Sundry Notice (Form 3160-5, enclosed) to the EPA Pawhuska office and to the Tulsa BLM office. Summarize operations performed and include all pertinent dates and results of operations including depths of cement plugs.